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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/081,071	02/20/2002	Douglas M. Baney	10991680-1	2322	
7590 03/26/2004			EXAMINER		
AGILENT TECHNOLOGIES, INC.			NGUYEN, DUNG T		
Legal Department, DL429 Intellectual Property Administration			ART UNIT	PAPER NUMBER	
P.O. Box 7599			2828		
Loveland, CO	80537-0599		DATE MAILED: 03/26/200	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/081,071	BANEY ET AL.				
		Examiner	Art Unit				
		Dung (Michael) T Nguyen	2828				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet w	vith the correspondence ad	idress			
THE - Exte after - If the - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR REPLICATION MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. SIX (6) MONTHS from the mailing date of this communication. SIX (6) MONTHS from the mailing date of this communication. SIX (6) Period for reply specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statular reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).		reply be timely filed irty (30) days will be considered timel NTHS from the mailing date of this c BANDONED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 19.	January 2004.					
·		s action is non-final.					
3)□	,						
Disposit	ion of Claims						
_	Claim(s) <u>2-12</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra						
·	5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>2-12</u> is/are rejected.						
7)	Claim(s) is/are objected to.		PAUL IP	P			
8)	Claim(s) are subject to restriction and/	or election requirement.	PAUL IP SUPERVISORY PATENT E)	KAMINER			
Applicati	ion Papers		TECHNOLOGY CENTER	2800			
9)	The specification is objected to by the Examin	er.					
-	) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
·	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by the E	xaminer. Note the attache	d Office Action or form P7	ΓΟ-152.			
Priority ι	ınder 35 U.S.C. § 119						
a)l	Acknowledgment is made of a claim for foreig  All b) Some * c) None of:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Bureace the attached detailed Office action for a list	nts have been received.  Its have been received in A  Drity documents have been  Au (PCT Rule 17.2(a)).	Application No n received in this National	Stage			
Attachmen	• •	<b></b> □	C (PTO 440)				
1) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) (s)/Mail Date				
3) 🔲 Inforr	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date		Informal Patent Application (PTC	O-152)			

### **DETAILED ACTION**

## Response to Arguments

Applicant's arguments with respect to claims 2-12 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 2 and 12, it is not clear as whether the second cavity and the second wavelength are existed since the claims recite the first cavity and the first wavelength.

The remaining claims are dependent on the above rejected claims and therefore are also rejected.

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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in this application in view of Clayton et al. (US2003/0039024).

With respect to claims 2-4 and 10-11, Prior art shows in Fig.1 (Jepson Style claim) a bottom mirror 101, an active region 102, an optical fiber 106, and a polarization filter 104. Prior art lacks a top mirror comprising a Bragg reflector and a pumping laser. Clayton teach in Fig.3 a top mirror 46 comprising a Bragg reflector and a pumping laser 34. For the benefit of forming an optical cavity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Prior art a top mirror comprising a Bragg reflector and a pumping laser as taught by Clayton.

With respect to claim 12, Prior art and Clayton disclose all limitations of the claim except for the top contact. It would have been obvious to one having

ordinary skill in the art at the time the invention was made to include the contact since it was known in the art that a semiconductor laser cannot be operable without the contact.

Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in this application in view of Clayton et al.

(US2003/0039024) and further in view of Boucart et al. (US6535541). Prior art and Clayton disclose all limitations of the claims except for a mechanism for altering the wavelength of the light reflected. Boucart teach in Fig. 19 a mechanism for altering the wavelength of the light reflected (col.10, 1.8-19). For the benefit of altering the wavelength, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Prior art and Clayton a mechanism for altering the wavelength of the light reflected as taught by Boucart.

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### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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## **Communication Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (571) 272-1941. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800

Michael Dung Nguyen